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SHARP PATENTS

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ATTACHMENT B

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PAGE 19/22 * RCVD AT 2/17/2005 2:48:32 PM [Eastern Standard Time] * SVR:USPTO-EXRF-17 * DNIS:8729306 * CSID:13608178505 * DURATION (mm:ss):06-14

Exhibit (Sposili)

PUBLICATIONS

- 1 B. Okhuysen, R. C. Cochran, R. E. Allred, R. Sposili, and T. M. Donnellan, "Interface/interphase studies in epoxy matrix composites," *J. Adhesion* 45, 3 (1994).
- 2 J. S. Im and R. S. Sposili, "Crystalline Si films for integrated active-matrix liquid-crystal displays," *Mat. Res. Soc. Bull.* 21(3), 39 (1996).
- 3 R. S. Sposili and J. S. Im, "Sequential lateral solidification of thin silicon films on SiO₂," *Appl. Phys. Lett.* 69(19), 2864 (1996).
- 4 J. S. Im, R. S. Sposili, and M. A. Crowder, "Single-crystal Si films for thin-film transistor devices," *Appl. Phys. Lett.* 70(25), 3434 (1997).
- 5 R. S. Sposili, M. A. Crowder, and J. S. Im, "Single-crystal Si films via a low-substrate-temperature excimer-laser crystallization method," in *Mater. Res. Soc. Symp. Proc.*, edited by R. W. Collins, P. M. Fauchet, I. Shimizu et al. (Pittsburgh, 1997), Vol. 452, pp. 953.
- 6 M. A. Crowder, P. G. Carey, P. M. Smith, R. S. Sposili, H. S. Cho, and J. S. Im, "Low-temperature single-crystal Si TFTs fabricated on Si films processed via sequential lateral solidification," *IEEE Elect. Dev. Lett.* 19(8), 306 (1998).
- 7 J. S. Im, M. A. Crowder, R. S. Sposili, J. P. Leonard, H. J. Kim, J. H. Yoon, V. V. Gupta, H. Jin Song, and H. S. Cho, "Controlled super-lateral growth of Si films for microstructural manipulation and optimization," *Phys. Stat. Sol. A* 166, 603 (1998).
- 8 R. S. Sposili and J. S. Im, "Line-scan sequential lateral solidification of Si thin films," *Appl. Phys. A* 67(3), 273 (1998).
- 9 M. A. Crowder, Robert S. Sposili, A. B. Limanov, and James S. Im, "Sequential lateral solidification of PECVD and sputter deposited a-Si films," in *Mater. Res. Soc. Symp. Proc.*, edited by K. L. Jensen, W. Mackie, D. Temple et al. (Pittsburgh, 2000), Vol. 621, pp. Q9.7.1.

CONFERENCE PRESENTATIONS

- 1 Robert S. Sposili and James S. Im, "Sequential lateral solidification of thin Si films: A low-temperature process for producing single-crystal Si films on SiO₂," presented at the MRS 1995 Fall Meeting, Boston, MA, 1995.
- 2 Robert S. Sposili, M. A. Crowder, and James S. Im, "Single-crystal silicon films via a low-substrate-temperature excimer-laser crystallization method," presented at the MRS 1996 Fall Meeting, Boston, MA, 1996.
- 3 Robert S. Sposili, M. A. Crowder, and James S. Im, "Low-temperature excimer-laser crystallization technique for producing single-crystal Si films on SiO₂," presented at the Materials Research Society of Japan (MRS-J) 1996 Annual Meeting, Makuhari, Japan, 1996.
- 4 Robert S. Sposili, M. A. Crowder, and James S. Im, "Thin-film single-crystal Si on SiO₂ via a low-temperature excimer-laser crystallization technique," presented at the 190th Electrochemical Society Meeting, San Antonio, TX, 1996.
- 5 M. A. Crowder, Robert S. Sposili, and James S. Im, "Microstructural design of sequential lateral solidification-processed crystalline Si films," presented at the MRS 1997 Spring Meeting, San Francisco, CA, 1997.
- 6 Robert S. Sposili, M. A. Crowder, and James S. Im, "Microstructural characterization of single-crystal silicon films obtained via sequential lateral solidification," presented at the MRS 1997 Spring Meeting, San Francisco, CA, 1997.
- 7 James S. Im, R. S. Sposili, H. J. Song, H. J. Kim, M. A. Crowder, V. V. Gupta, J. H. Yoon, H. Cho, and J. P. Leonard, "Excimer laser-induced crystallization of Si films for large-area electronics," presented at the 17th International Conference on Amorphous and Microcrystalline Semiconductors (ICAMS 97), Budapest, Hungary, 1997.
- 8 M. A. Crowder, Robert S. Sposili, and James S. Im, "Surface planarization and texture engineering of thin Si films prepared via sequential lateral solidification," presented at the MRS 1998 Spring Meeting, San Francisco, CA, 1998.
- 9 Robert S. Sposili, E. Lee, D. Haight, D. Riordan, Dongbyum Kim, and James S. Im, "Sequential lateral solidification of Si films via line-scan irradiation," presented at the MRS 1998 Spring Meeting, San Francisco, CA, 1998.
- 10 Robert S. Sposili, M. A. Crowder, Sook-Young Kang, and James S. Im, "The sequential lateral solidification process: Characterization of the energy-density processing window," presented at the MRS 1998 Spring Meeting, San Francisco, CA, 1998.

Exhibit (Sposili)

- 11 Robert S. Sposili and James S. Im, "Excimer-laser crystallization of silicon thin films: Production of microstructures optimized for thin-film transistor applications," presented at the ASM International New York Metro Chapter Meeting, New York, NY, 1998.
- 12 M. A. Crowder, K. Adib, Hans S. Cho, Robert S. Sposili, and James S. Im, "Large-grained polycrystalline Si films with uniform microstructures obtained via sequential lateral solidification," presented at the MRS 1998 Fall Meeting, Boston, MA, 1998.
- 13 Robert S. Sposili, E. Lee, D. Haight, D. Riordan, Dongbyum Kim, and James S. Im, "Multiple-pulse irradiation effects in excimer laser-induced crystallization of amorphous Si films," presented at the MRS 1998 Fall Meeting, Boston, MA, 1998.
- 14 M. A. Crowder, Robert S. Sposili, and James S. Im, "Morphological and Defect Analysis of Sequential Lateral Solidification Processed Si Films," presented at the Photonics West, IS&T/SPIE 10th International Symposium, Electronic Imaging: Science & Technology, San Jose, CA, 1998.
- 15 James S. Im, M. A. Crowder, Robert S. Sposili, J. P. Leonard, H. J. Kim, J. H. Yoon, V. V. Gupta, H. Jin Song, and H. S. Cho, "Large grain growth: Realization and limitations," presented at the LCAMS 98: 185. International WE-Heraeus-Workshop on Laser Crystallization and Modification of Semiconductors 1998, Tutzing, Germany, 1998.
- 16 Robert S. Sposili, M. A. Crowder, and James S. Im, "A parametric study of the sequential lateral solidification process—An excimer-laser crystallization process for producing single-crystal Si thin films on low-temperature substrates," presented at the Photonics West, IS&T/SPIE 10th International Symposium, Electronic Imaging: Science & Technology, San Jose, CA, 1998.
- 17 James S. Im, Robert S. Sposili, and M. A. Crowder, "Excimer laser-Induced sequential lateral solidification of a-Si films for LSI applications," presented at the Photonics West, LASE '98: High-Power Lasers and Applications, San Jose, CA, 1998.
- 18 James S. Im, Robert S. Sposili, M. A. Crowder, A. B. Limanov, Hans S. Cho, D. B. Kim, and K. Adib, "Pulsed-laser-induced crystallization of thin Si films," presented at the The European Material Conference (E-MRS 1999 Spring Meeting), Strasbourg, France, 1999.
- 19 Mark A. Crowder, Robert S. Sposili, A. B. Limanov, and James S. Im, "Crystallization of PECVD, LPCVD, and sputter deposited Si films via SLS," presented at the MRS 2000 Spring Meeting, San Francisco, CA, 2000.
- 20 James S. Im, D. B. Kim, A. B. Limanov, J. P. Leonard, R. S. Sposili, and S. Y. Kang, "The requirements, definitions, analysis and optimization of controlled superlateral growth (C-SLG) processes," presented at the MRS 2000 Spring Meeting, San Francisco, CA, 2000.
- 21 Hyun-Chul Jin, John R. Abelson, Martin K. Erhardt, Ralph G. Nuzzo, Robert S. Sposili, and James S. Im, "An array of single crystalline silicon dots on curved substrate for optical imaging applications," presented at the MRS 2000 Spring Meeting, San Francisco, CA, 2000.
- 22 Robert S. Sposili, Mark A. Crowder, and James S. Im, "New excimer laser crystallization system for conducting the sequential lateral solidification (SLS) process," presented at the MRS 2000 Spring Meeting, San Francisco, CA, 2000.
- 23 Kanti Jain, Marc Zemel, Marc Klosner, and Robert Sposili, "Large-area, high-resolution materials surface processing with excimer lasers," presented at the MRS 2001 Spring Meeting, San Francisco, CA, 2001.
- 24 Robert S. Sposili, M. A. Crowder, B. A. Turk, and James S. Im, "Sequential lateral solidification schemes for rapid crystallization of as-deposited amorphous silicon films," presented at the MRS 2001 Spring Meeting, San Francisco, CA, 2001.
- 25 Robert S. Sposili, Brandon A. Turk, and James S. Im, "Considerations in the Design of Equipment for the Manufacture of LTPS-TFTs using Sequential Lateral Solidification," presented at the KIOS/IMID 2001 International Meeting on Information Display, Daegu, Korea, 2001.
- 26 Robert S. Sposili and James S. Im, "Stochastic Modeling of the Sequential Lateral Solidification (SLS) Process," presented at the Asia Display/IDW '01, Nagoya, Japan, 2001.
- 27 Robert S. Sposili, Brandon A. Turk, and James S. Im, "Sequential Lateral Solidification Schemes for High-Throughput Crystallization of As-Deposited Silicon Films," presented at the Asia Display/IDW '01, Nagoya, Japan, 2001.

Exhibit (Sposili)

PATENTS (Pending)

- 1 James S. Im, Robert S. Sposili, and Mark A. Crowder, "Methods for producing uniform large-grained and grain boundary location manipulated polycrystalline thin film semiconductors using sequential lateral solidification," USA (1999).
- 2 James S. Im, Robert S. Sposili, and Mark A. Crowder, "Systems and methods using sequential lateral solidification for producing single or polycrystalline silicon thin films at low temperatures," USA (1999).
- 3 Robert S. Sposili, Nestor O. Farmiga, and Kanti Jain, "High-throughput materials processing system," USA (2000).
- 4 James S. Im, Robert S. Sposili, and Mark A. Crowder, "Systems and methods for planarization of polycrystalline and single film semiconductor surfaces during and after sequential lateral solidification," PCT (2000).
- 5 Kanti Jain, Robert S. Sposili, Marc A. Klosner, and Marc I. Zemel, "Dual-beam materials-processing system," USA (2001).
- 6 Robert S. Sposili and James S. Im, "Method and system for providing a single-scan, continuous motion sequential lateral solidification," PCT (2001).